CALCASIEU ESTUARY

In 1999, the U.S. EPA Region 6 conducted a Remedial Investigation (RI) for the Calcasieu Estuary in Calcasieu Parish, located in the southwestern corner of Louisiana. The Calcasieu Estuary study area extends from the saltwater barrier located north of Lake Charles to Moss Lake, and is situated north of the intersection of the Calcasieu River Ship Channel and the Intercoastal Waterway. The City of Lake Charles, Louisiana and several other smaller neighboring cities are located within the study area. Saltwater migrating north from the Gulf of Mexico via the Calcasieu River and freshwater draining toward the Gulf of Mexico from numerous inland rivers, bayous, and lakes create the estuary.

A draft RI report was issued in November 2000 and subsequently finalized in August 2003. The report identified five areas within the Calcasieu Estuary that required further response actions.

In May 2003, the LDEQ and the U.S. EPA signed a Memorandum of Agreement (MOA) designating the lead agency for the five areas identified in the RI report. The LDEQ was designated the lead agency for the Bayou d'Inde, the Citgo Lagoon, and the Indian Marais Bayou Sites.

BAYOU D'INDE

Bayou d'Inde is greater than nine miles long and is located in the northern portion of the Calcasieu Estuary, west of the City of Lake Charles, Louisiana. Bayou d'Inde's headwaters originate in the western portion of Sulphur, Louisiana near the Interstate 10 Bridge. Bayou d'Inde flows primarily east-southeast and empties into the Calcasieu River Ship Channel, southwest of Coon Island. The site consists of Bayou d'Inde from the confluence of Little Bayou d'Inde to the Calcasieu River Ship Channel, including the small intermediate marshes along the banks of Bayou d'Inde near the confluence of Maple Fork Bayou and the more saline Lockport Marsh located at the confluence of Bayou d'Inde and the Calcasieu River Ship Channel.

The RI report identified five industrial locations as discharge sources to Bayou d'Inde. Four of the Potentially Responsible Parties (PRPs) have entered into a Cooperative Agreement (CA) with the LDEQ. PPG Industries, Inc. and Citgo Petroleum Corporation signed the CA in

December 2003. Occidental Chemical Corporation (currently the Equistar location) signed the CA in June 2004, and Westlake Polymers signed the CA in September 2004. The CA required the PRPs to submit a work plan for the development of preliminary RECAP standards, the identification of areas of investigation (AOIs), and the preparation of a corrective action study (CAS).

In March 2004, the PRPs submitted the work plan, and in May 2004, the LDEQ submitted comments to the PRPs on the work plan.

The PRPs submitted responses to the LDEQ on the Work Plan comments in June 2004. The comments are currently under review. The LDEQ will provide a status update on the Bayou d'Inde project to the Calcasieu Estuary Task Force before granting approval to the Work Plan.

THE CITGO LAGOON AND INDIAN MARAIS BAYOU

General Facility Summary

The CITGO Petroleum Corporation (CITGO) Lake Charles Manufacturing Complex consists of a crude oil refinery (refinery) and a lube oil production facility (lube plant). The CITGO facility is located in southwest Louisiana, approximately six miles southwest of Lake Charles on Highway 108. The refinery and lube plant occupy approximately 600 acres of the total 1600 acres of contiguous land area owned by CITGO.

The CITGO\CIT-CON lube-plant operates at least seven (7) hazardous waste management units at the facility that require groundwater monitoring. The units are as follows: surge pond; secondary waste water treatment plant, which consists of aeration and an equalization basin; west impoundment; south impoundment; land treatment facility. Units located at the CIT\CON lube plant are the lube retention basin, the holding basin one and two, and interconnecting ditch.

In addition to the hazardous waste management units described above, CITGO\CIT-CON operates solid waste management units (SWMU) requiring groundwater monitoring. The units are as follows: aerobic sludge digester basin; settling basin; clarifier; polishing pond; interconnecting ditches; refinery cooling towers 5 and 6; sludge basin; Land Treatment Plots 1, 2, and 3; earthen ditches; clay ponds; stabilization and aeration basins.

CITGO is bordered to the east by the Calcasieu River and to the north by Bayou d'Inde. The Indian Marais Bayou flows through the southernmost portions of the refinery. The site is relatively flat, with elevations ranging between 10 to 15 feet above sea level. The surficial topography slopes gently away from the central portion of the complex, toward the three water bodies described above. The shallow geology consists of alternating mixtures of sands, silts, and clays. The shallow subsurface to approximately 100 feet below ground contains two water-bearing zones described as the Upper Hydrologic Unit and the Lower Hydrologic Unit. What has been described as the Blue Clay Unit separates these two water-bearing zones.

CITGO maintains and samples approximately 107 monitoring wells as required by a LDEQ permit. Analytical parameters include petroleum hydrocarbon compounds.

Items related to Administrative Order of June 10, 2002

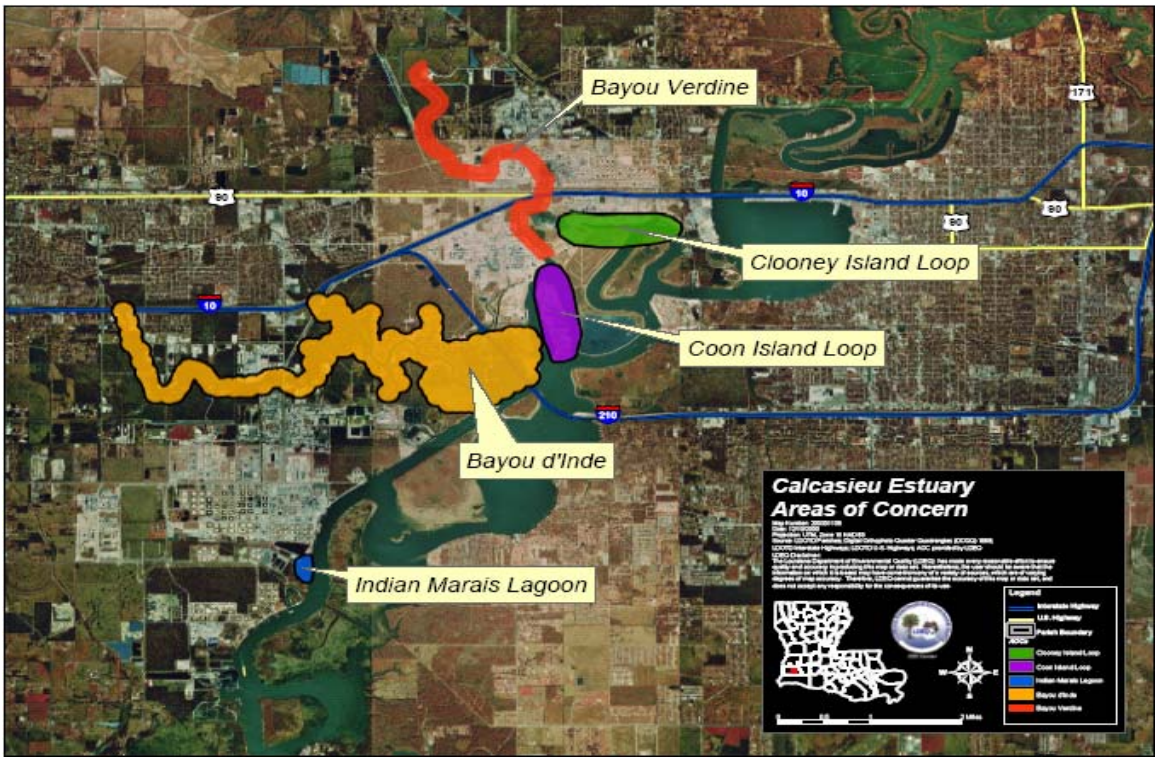
The rerouting of Indian Marais Bayou is continuing as of June 2004. The north and south bridges have been completed. Present activities include excavation of approximately 1200 feet of the new channel, construction of the south road connecting the south bridge and lagoon levee, driving of sheet piles for the reroute channel and construction of support structures for the discharge line. Current projections indicate project completion in January 2005.

The LDEQ response to the Remedial Facility Investigation (RFI) per an Administrative Order was issued April 15, 2004. CITGO has responded to the LDEQ comments. The LDEQ is presently preparing a response to the facility's comments.

Other items

The West Impoundment received final closure in May 2004.

The RFI work plan for solid waste management units not associated with the surge pond is under review by the LDEQ. This response should be complete by end of summer 2004.



Drawing of Bayou d'Inde section of Site

CITGO Lagoon